

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A shaped article of arbitrary shape and size comprising, an essentially anhydrous biodegradable polymer ("biopolymer") comprising an aromatic-aliphatic copolyester, or an aliphatic polyester having repeating units having from 2 to 5 carbons atoms, or a polyesteramide formed by reaction with at least one diacid, at least one diol, and at least one amino acid. [[and]]

from more than 5 and up to about 35 percent by weight of an essentially anhydrous inert particulate filler substantially uniformly dispersed in the biopolymer, the filler having a primary particle size in the range from about 1 μm -45 μm , wherein at least 75% of the particles are smaller than 25 μm , and

the biopolymer including the filler having a tensile strength of at least 2000 psi at 23°C in at least one direction.

2. (Cancelled).

3. (Currently Amended) The shaped article of claim ~~[[2]]~~ 1 is film having a thickness in the range from about 0.025 mm (1 mil) to 0.125 mm (5 mils) which film is substantially transparent in a thickness of 0.025 mm and essentially free of agglomerates greater than 50 μm ; and each unit area of biofilm 0.025 mm thick, containing solid powder particles dispersed therein, has a variation in population density of the particles which is less than $\pm 20\%$.

4. (Original) The shaped article of claim 3 wherein the film has a thickness in the range from about 0.025 mm (1 mil) to 0.125 mm (5 mils), and a variation in population density of the particles which is less than $\pm 10\%$ from one unit area of the film to another.

5. (Original) The shaped article of claim 4 wherein the film is an aromatic-aliphatic copolyester.

6. (Withdrawn) A two-stage process for producing finished filled thermoplastic biopolymer in which the inert filler is uniformly distributed, in a first stage, comprising,

(i) adding from 20 wt % to 100 wt % of essentially anhydrous inert filler particles to be present in the finished film, to essentially an anhydrous biopolymer;

(ii) blending the mixture at a temperature below the melting point of the biopolymer, to make a biopolymer concentrate in which the concentration of dispersed particles is in the range from about 25 to about 60 phr for 50 phr of biopolymer;

(iii) further dispersing the inert particles while melting the polymer to form a molten concentrate, preferably in the barrel of an extruder;

(iv) cooling the molten concentrate into a solidified mass of arbitrary shape; and,

(v) comminuting the solidified mass to form granules smaller than about 12.5 mm; and in a second stage comprising,

(vi) drying the granules to an essentially anhydrous condition;

(vii) blending dried granules with at least twice as much fresh essentially anhydrous biopolymer so as to provide the desired amount of more than 5 wt %, but less than 35 wt % filler in a finished blend; and,

(viii) thermoforming the finished blend into a desired shape having a tensile strength no lower than 2000 psi in at least one direction.

7. (Withdrawn) The process of claim 6 wherein step (viii) comprises blowing film having a thickness in the range from about 0.025 mm to 0.25 mm, and the film is substantially transparent.

8. (Withdrawn) The process of claim 6 wherein step (viii) comprises injection molding a shaped article.

9. (Withdrawn) The process of claim 7 wherein in step (ii) blending the mixture to make a biopolymer concentrate in which the concentration of dispersed particles is about 50 phr for 50 phr of biopolymer.

10. (Currently Amended) A concentrated composition comprising:

an essentially anhydrous biodegradable polymer ("biopolymer"), comprising an aromatic-aliphatic copolyester, or an aliphatic polyester having repeating units having from 2 to 5 carbon atoms, or, a polyesteramide formed by reaction with at least one diacid, at least one diol, and at least one amino acid. [[and]]

from about 25 to about 60 parts by weight of an essentially anhydrous inert particulate filler substantially uniformly dispersed in 50 parts by weight of the biopolymer, the filler having a primary particle size in the range from about 1 μm to about 45 μm , wherein at least 75% of the particles are smaller than 25 μm , and

the biopolymer including the filler having a tensile strength of at least 2,000 psi at 23°C in at least one direction.

11. (Cancelled).

12. (New) The shaped article of claim 1, wherein said biopolymer is one or more of the following; polylactic acid, a terpolymer based on polylactic acid, a polylactic acid-based polymer, polyglycolic acid, poly(lower C₂-C₅ alkylene carbonate), a modified polyethylene terephthalate, a biopolymer consisting essentially of alternating terephthalate and an aliphatic unit derived from two diols, polyhydroxyvalerate, polyhydroxybutyrate-hydroxyvalerate copolymer, polycaprolactone, a succinate-based aliphatic polymer including polybutylene

succinate, polybutylene succinate adipate, or polyethylene succinate, or a biopolymer derived from adipic acid, 1,4-butane diol, and dimethyl-terephthalate.

13. (New) The shaped article of claim 12, wherein said inert particle filler is silica, calcium carbonate, titanium dioxide, pumice, or any combination thereof.

14. (New) The shaped article of claim 4, wherein said biopolymer is one or more of the following; polylactic acid, a terpolymer based on polylactic acid, a polylactic acid-based polymer, polyglycolic acid, poly(lower C₂-C₅ alkylene carbonate), a modified polyethylene terephthalate, a biopolymer consisting essentially of alternating terephthalate and an aliphatic unit derived from two diols, polyhydroxyvalerate, polyhydroxybutyrate-hydroxyvalerate copolymer, polycaprolactone, a succinate-based aliphatic polymer including polybutylene succinate, polybutylene succinate adipate, or polyethylene succinate, or a biopolymer derived from adipic acid, 1,4-butane diol, and dimethyl-terephthalate.

15. (New) The shaped article of claim 14, wherein said inert particle filler is silica, calcium carbonate, titanium dioxide, pumice, or any combination thereof.

16. (New) The shaped article of claim 5, wherein said biopolymer is one or more of the following; a terpolymer based on polylactic acid, a polylactic acid-based polymer, a biopolymer consisting essentially of alternating terephthalate and an aliphatic unit derived from two diols, or a biopolymer derived from adipic acid, 1,4-butane diol, and dimethyl-terephthalate.

17. (New) The shaped article of claim 16, wherein said inert particle filler is silica, calcium carbonate, titanium dioxide, pumice, or any combination thereof.

18. (New) The concentrated composition of claim 10, wherein said biopolymer is one or more of the following; polylactic acid, a terpolymer based on polylactic acid, a polylactic acid-based polymer, polyglycolic acid, poly(lower C₂-C₅ alkylene carbonate), a modified polyethylene terephthalate, a biopolymer consisting essentially of alternating terephthalate and an aliphatic unit derived from two diols, polyhydroxyvalerate, polyhydroxybutyrate-hydroxyvalerate copolymer, polycaprolactone, a succinate-based aliphatic polymer including polybutylene succinate, polybutylene succinate adipate, or polyethylene succinate, or a biopolymer derived from adipic acid, 1,4-butane diol, and dimethyl-terephthalate.

19. (New) The concentrated composition of claim 18, wherein said inert particle filler is silica, calcium carbonate, titanium dioxide, pumice, or any combination thereof.